BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-1-E

In the Matter of Annual Review of Base Rates for Fuel Costs for Duke Energy Progress , LLC	)	**DIRECT TESTIMONY OF** **GEORGE V. BROWN FOR** **DUKE ENERGY PROGRESS, LLC**

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is George V. Brown and my business address is 400 South Tryon St., Charlotte, North Carolina, 28202.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am General Manager of Strategy, Policy, and Strategic Investment in the Distributed Energy Technology group at Duke Energy Corporation. I am responsible for the development and execution of strategy and policy support related to distributed energy technology for Duke Energy's retail franchises, including Duke Energy Progress, LLC ("DEP" or the "Company") and Duke Energy Carolinas, LLC ("DEC," together with DEP, the "Companies"). This includes evaluation of legislation and regulation, and implementation of customer programs such as those associated with Act 236 (the "Act"), the South Carolina Distributed Energy Resource Act of 2014.

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I received a Bachelor of Arts in Ecomonics at Harvard College and a Masters in Business Administration at New York University. I have been employed at Duke Energy since 1998 in a variety of Finance and Strategy roles.

Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION BEFORE?

A. Yes. I testified before the Public Service Commission of South Carolina ("PSCSC" or "Commission") in DEP's 2017 annual fuel and environmental cost recovery proceedings in Docket No. 2017-1-E.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide support for the Distributed Energy Resource Program ("DERP") costs that are incorporated into the proposed fuel factors prepared by Witness Ward. I will describe the nature of costs filed as well as any changes made to the DERP portfolio since the 2017 fuel proceeding.

Q. PLEASE DESCRIBE THE LEVELS OF SOLAR ADOPTION DEP HAS EXPERIENCED SINCE THE IMPLEMENTATION OF ACT 236.

A. Since January 1, 2015 DEP has seen significant growth in solar adoption as shown below in Table 1 and as a result is on track to meet the Act 236 goals.

Table 1: Duke Energy Progress Solar Adoption, as of March 1, 2018

	Act 236 Goal	Capacity Currently Installed	% of Goal
Utility Scale Solar (1MW – 10MW)	13	5	38.5%
Customer Scale Solar (<1MW)	13	6.9	53.1%
Small Scale Solar (<20kW)	3	2.5	83.3%

Notes
1. All values in MW-AC
2. Customer Scale Solar is inclusive of Small Scale Solar

The Company has encouraged solar adoption through the Net Energy Metering incentive and other DERP efforts discussed later in my testimony.

Q. PLEASE DESCRIBE THE DERP COSTS THAT ARE INCLUDED IN THE REVIEW, FORECAST, AND BILLING PERIODS.

A. Pursuant to Commission Order No. 2015-515, the Company offers its customers a variety of programs to support solar development. As a result, the Company incurred DERP incremental and avoided costs totaling $1,593,836 in the period from March 1, 2017 through February 28, 2018 (the "review period"); anticipates incurring $978,896 during

the period March 1, 2018 through June 30, 2018 (the "forecast period"); and projects to incur $3,555,821 in the period July 1, 2018 through June 30, 2019 (the "billing period").

These costs represent the avoided and incremental costs associated with the Company's approved DERP offerings, including 1) Purchased Power Agreements executed to fulfill the Company's utility-scale solar goals under Act 236; 2) Distributed Energy Resource ("DER") Net Energy Metering ("NEM") Incentive; 3) Solar Rebate Program; 4) Carrying Costs on Deferred Amounts; 5) NEM Avoided Capacity Costs; 6) NEM Meter Costs; 7) General and Administrative Expenses, including incremental labor costs as a direct result of DERP, IT and billing enhancements, and other administrative costs associated with delivering these new programs to customers. Table 2, below, is an itemization of actual and expected DERP costs.

Table 2: DEP DERP Cost Summary - Review, Forecast, and Billing Periods

Cost Type	Review Period 3/1/17-2/28/18	Forecast Period 3/1/18-6/30/18	Billing Period 7/1/18-6/30/19
DERP Incremental Costs			
Purchased Power Agreements	$ -	$ -	$ -
DER NEM Incentive	152,811	128,880	572,127
Solar Rebate Program - Amortization	374,304	216,940	918,380
Shared Solar Program	-	-	-
Carrying Costs on Deferred Amounts	337,564	207,070	855,882
NEM Avoided Capacity Costs	6,868	5,377	23,678
NEM Meter Costs	26,011	8,685	27,381
General and Administrative Expenses	595,057	161,896	355,840
Interest on under-collection due to cap	53	-	-
Adjustments[1]	75,815	-	-
Total DER Incremental Costs	$ 1,568,483	$ 728,848	$ 2,753,288
DERP Avoided Cost - Energy & Capacity			
Purchased Power Agreements	25,353	250,048	802,533
Shared Solar Program	-	-	-
Total DERP Avoided Cost	$ 25,353	$ 250,048	$ 802,533
Total Incremental and Avoided Cost	**$ 1,593,836**	**$ 978,896**	**$ 3,555,821**

Note

[1]Adjustments primarily related to net metering true-up

Sources

Incremental Costs: Ward Exhibit 9 & 11

Avoided Costs: Ward Exhibit 13 & 14

Q. PLEASE DESCRIBE THE COMPANY'S DER NEM INCENTIVE AND COSTS.

A. The DER NEM Incentive is a credit available to eligible net energy metering customer-generators that enables the customer-generator to receive a full retail rate compensation for each kilowatt-hour (kWh) generated by their solar facility, for the period of time defined in the settlement agreement reached in Docket No. 2014-246-E.

The DER NEM Incentive approximates the difference between the value of a NEM Distributed Energy Resource, as computed using the methodology approved in Docket No. 2014-246-E, and the retail rate. Settling Parties in that same docket agreed that the DER NEM Incentive shall be treated as an incremental cost, as defined in S.C. Code Ann. § 58-39-140, effectively socializing the cost of the DER NEM Incentive to all retail customers as a component of the utilities' respective DER programs.

As shown on the "DER NEM Incentive" line in Table 2 above, the total costs associated with this incentive are expected to grow significantly in the Billing Period. This growth is related to an expected increase in customers who have elected service under Rider RNM due to the availability of the Solar Rebate Program and the NEM incentive, discussed below.

Table 3, below, depicts the current and expected number of customers and the associated kilowatts (kW) (DC) of those who have elected to net meter. In accordance with Act 236, the Company will make net energy metering available to customer generators until the total nameplate generating capacity of net energy metering systems equals two percent of the Company's retail peak demand, which is roughly 26,000 kW (AC). Rider NM-SC refers to the Company's legacy net metering rider available from 2008-2015; Rider NM-SC closed to new customers when Rider RNM was made available. In late 2015, all customers who had previously elected Rider NM-SC were contacted by the Company and encouraged to switch to Rider RNM due to the fact that Rider NM expires in 2020[1] and Rider RNM expires in 2025.[2]

[1] *See* S.C. Code Ann § 58-40-20(A) (generators whose net energy metering facilities were energized prior to the availability of net energy metering rates approved by the commission under the terms of this chapter may remain in historic net energy metering programs through December 31, 2020).
[2] *See* Settlement Agreement in Docket No. 2014-246-E.

Table 3: DEP Net Energy Metering Status and Projections - Review, Forecast, and Billing

Rider RNM-3 and Rider NM-SC	Review Period 3/1/17-2/28/18	Forecast Period 3/1/18 - 6/30/18	Billing Period 7/1/18 - 6/30/19
Capacity (kW-DC)	6,956	11,832	19,904
# of Customers	307	385	541

Q. COMMISSION ORDER 2015-194 REQUIRES THAT THE VALUE OF NEM DISTRIBUTED ENERGY RESOURCES IS COMPUTED ANNUALLY. WHAT IS THE 2018 VALUE AND HOW DID YOU ARRIVE AT THAT NUMBER?

A. Through the review of applicable input assumptions, the Company has updated the 2018 value of NEM Distributed Energy Resources to $0.05036 per kWh for Schedules RES, R-TOU-D, and SGS and $0.05026 for all other schedules. Table 4, below, lists the components of the methodology used to determine the value of NEM Distributed Energy Resources. The calculation is consistent with the methodology approved in Order No. 2015-194. The methodology includes all categories of potential costs or benefits to the utility system that are capable of quantification or possible quantification in the future. Where there is currently a lack of capability to accurately quantify a particular category, that category has been included in the methodology as a placeholder. For example, while "Avoided CO2 Emission Cost" is included as a component, its value is currently zero; a zero monetary value for CO2 will be used until state or federal laws or regulations result in an avoidable cost on Utility systems for these emissions, per the approved methodology.

Table 4: Value of NEM Distributed Energy Resource, by Component

Components of NEM Distributed Energy Resources Value	Component Value ($ per kWh) Small PV[4]	Component Value ($ per kWh) Large PV[4]
Avoided Energy Costs	$0.036195	$0.036187
Avoided Capacity Costs	$0.013453	$0.013367
Ancillary Services	$0.000000	$0.000000
T & D Capacity	$0.000000	$0.000000
Avoided Criteria Pollutants[1]	$0.000024	$0.000023
Avoided CO2 Emissions Costs	$0.000000	$0.000000
Fuel Hedge[2]	$0.000000	$0.000000
Utility Integration & Interconnection Cost	$0.000000	$0.000000
Utility Administrative Cost	$0.000000	$0.000000
Environmental Costs	$0.000000	$0.000000
Subtotal	$0.049672	$0.049577
Line Losses[3]	$0.000686	$0.000684
Total Value of NEM Distributed Energy Resources	$0.05036	$0.05026

Notes

[1] Pursuant to the Settlement Agreement reached in the Company's 2016 fuel case (Docket 2016-1-E), NOx & SOx that were previously included in marginal energy cost have been separately identified. The Company will identify other avoided criteria pollutant cost separately from marginal energy cost in future avoided cost analyses.

[2] Pursuant to the Settlement Agreement reached in the Company's 2017 fuel case (Docket No. 2016-1-E), the Company has calculated the fuel hedge value in a manner consistent with the definition according to the Settlement Agreement in Docket No. 2015-246-E, Attachment A. Because no fuel hedge exists, as calculated, there is no value to assign in the table.

[3] Line loss factors are 1.15% on on-peak marginal energy, 1.138% for off-peak marginal energy and 2.0206% for marginal capacity per DEP's updated 2018 line loss analysis.

[4] "Small PV" refers to a load shape reflecting generation installed by a lower usage residential or small commercial/industrial customer. "Large PV" refers to a load shape characteristic of generation by a customer with higher consumption requirements and applies to all other nonresidential rate schedules.

Q. HAVE YOU REVIEWED THE CALCULATION METHODOLOGY OF THE DER NEM INCENTIVE PROVIDED BY WITNESS WARD?

A. Yes. I have reviewed Ward Exhibit 15.

Q. IS THE CALCULATION METHODOLOGY PROVIDED BY WITNESS WARD CONSISTENT WITH THE METHODOLOGY APPROVED IN DOCKET NO. 2014-246-E AND OUTLINED IN COMMISSION ORDER 2015-194?

A. Yes, it is consistent with the methodology approved in Docket No. 2014-246-E, and it applies the approved methodology using generic customer usage information and estimated solar generation data.

Q. PLEASE DESCRIBE EXHIBIT 1 TO YOUR TESTIMONY.

A. Brown Exhibit 1 provides the Company's proposed 2018 net metering rider, Rider RNM-6. The only changes to the tariff are the following: (1) the updated value of NEM Distributed Energy Resources; (2) revisions to the general provisions to add SGS-TOU-CLR to the list of schedules that do not qualify for Rider RNM[3]; (3) the removal of a reference to the Palmetto Clean Energy (PaCE) program because the program has been discontinued; and (4) the elimination of the requirement to install a second revenue-grade meter on the net metering customer's premises. The Company originally requested to install such additional meters, as reflected in the current tariff, to allow the Company to study the impacts of net energy metering on the distribution system. The Company proposes to now remove that requirement for new net metering customers because it believes a sufficient number of second meters have been installed to achieve the original objective. Finally, it is not necessary to update the rate under the annual credit for excess generation until a new Purchased Power Schedule is approved.

Q. PLEASE DESCRIBE THE STATUS OF THE COMPANY'S SOLAR REBATE PROGRAM.

A. The Company's solar rebate program was implemented to assist the Company in meeting its Customer Scale solar requirement (facilities less than 1,000 kW) under Act 236. The Company has made available two solar rebate programs for its customers: the Small

[3] Schedule SGS-TOU-CLR was approved in DEP's 2016 rate case and is for constant loads serving only cable television amplifiers.

Solar Rebate Program and the Large Solar Rebate Program. Both provide a qualified customer with a rebate of $1.00 per watt-dc upon successful energization of a solar facility that conforms to the sizing requirements outlined in Act 236. As shown in Table 5, below, interest in the solar rebate, as measured by solar rebate applications received, has exceeded available capacity per Act 236 goals.

Table 5: Duke Energy Progress Solar Rebate Program Status, as of March 1, 2018

Solar Facility Size	ACT 236 Goal	Total Capacity of Rebate Applications Received	Total Capacity of Rebate Applications Accepted into the Rebate Program
"Small" - Up to 20kW-AC	At least 3,250 kW	3,490	3,200
"Large" - 20.01kW-AC - 1,000kW-AC	9,750 kW	12,250	9,400
Total	13,000 kW	15,740	12,650
*All Values in kW-AC			

As a result of applications in excess of available capacity, an active waiting list is in place for the program.

Q. PLEASE DESCRIBE THE DERP COSTS ASSOCIATED WITH THE COMPANY'S SOLAR REBATE PROGRAM.

A. The incremental costs associated with the Solar Rebate Program and included in this filing are the amortization of rebates paid, carrying costs on deferred amounts, and general and administrative expenses required to manage the program, as shown in Table 2.

Q. PLEASE DESCRIBE THE STATUS OF THE COMPANY'S SHARED SOLAR PROGRAM.

A. The Company's Shared Solar Program, approved in Order No. 2015-515, is a means for multiple retail customers to subscribe to and share in the economic benefits of one renewable energy facility. To date, the Company has filed and received approval for a Shared Solar tariff which includes a low income component, finished internal billing

system upgrades to enable the program, and signed agreements with three firms that will assist in outreach efforts as well as the application process for the low income component of the program. The Company is deploying technologies to assist with managing the program, such as a vendor website to receive applications and serve as a customer portal. The Company is working toward dedicating 1,000 kW of an existing Purchased Power Agreement (entered into pursuant to the utility-scale goals of Act 236) to the Shared Solar Program. The Company plans to begin marketing the Shared Solar Program later this year.

Q. **PLEASE DESCRIBE THE DERP COSTS ASSOCIATED WITH THE COMPANY'S SHARED SOLAR PROGRAM.**

A. The incremental costs associated with the Shared Solar Program are limited to the shared solar incentive and general and administrative expenses, including labor and IT project costs required to adapt the Company's database and billing systems to the Shared Solar transaction. These costs are listed as General and Administrative Expenses on Table 2.

Q. **PLEASE DESCRIBE THE RESULTS OF THE COMPANY'S REQUEST FOR PROPOSALS OF UTILITY-SCALE SOLAR FACILITIES, THE ASSOCIATED TIMELINE, AND COSTS.**

A. In the fall of 2015, the Company solicited competitive bids for solar PV from facilities totaling 13,000 kW (AC), the equivalent of one percent of the Company's estimated South Carolina retail peak demand. This solicitation resulted in 17 projects totaling 140 MW being placed on a short list in March of 2016. The Company has executed two PPAs totaling 15,000 kW (AC), which completes the Company's utility-scale solar goals under Act 236. As described previously, the Company is working to dedicate 1,000 kW of the

15,000 kW to the Company's Shared Solar Program. The Company has included incremental and avoided costs associated with one of the PPAs, under which the project began delivering power at the end of 2017. These costs are listed on Table 2. No incremental or avoided costs are included related to the second PPA, as it is not anticipated to be energized until the end of 2019.

Q. PLEASE DESCRIBE GENERAL AND ADMINISTRATIVE EXPENSES, INCLUDING INCREMENTAL LABOR COSTS AS A DIRECT RESULT OF DERP, IT AND BILLING ENHANCEMENTS, AND OTHER ADMINISTRATIVE COSTS ASSOCIATED WITH DELIVERING THESE NEW PROGRAMS TO CUSTOMERS.

A. As stated previously, included in this filing are incremental labor costs required to manage and implement the NEM Incentive program, the Solar Rebate Program, and the Shared Solar Program. Also included are the incremental costs required to adapt the Company's database and billing systems to accommodate Shared Solar transactions.

Q. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO COMMUNICATE WITH STAKEHOLDERS ABOUT DER PROGRAMS AND PROGRAM CHANGES IN THE PAST YEAR?

A. Since the Commission approved the Company's DER Program application in July of 2015, the Company has utilized various communication and outreach tools to ensure that solar stakeholders and retail customers have access to information about the Company's programs and are able to communicate with representatives from the Company about the programs. For example, the Company has: 1) conducted quarterly DER Collaborative meetings with a diverse group of stakeholders representing the environmental

community, low income community, solar installers, solar developers, The Alliance for Solar Choice, SolarCity, Sunrun, Walmart, Nucor, and the Office of Regulatory Staff; 2) conducted multiple educational sessions for solar installers and developers at meetings of the South Carolina Solar Council as well as for Shared Solar at a meeting of the South Carolina Clean Energy Business Alliance; 3) conducted webinars for solar installers, particularly as interest in the solar rebate program accelerated; 4) begun providing a summary of net metering adoption on the Duke Energy website; 5) begun working with an environmental justice stakeholder group in the Pee Dee region to promote the Shared Solar low income subscriptions; 6) provided call center support to retail customers and solar installers via its Renewable Service Center, which is staffed with approximately twenty professionals. The Company uses these outreach efforts as well as regular communication to keep stakeholders and retail customers informed of the status of the program offerings and other developments related to its DER programs.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

RENEWABLE NET METERING RIDER RNM-~~5~~6

AVAILABILITY

Available to residential and nonresidential Customers receiving concurrent service from Company, on a metered rate schedule, except as indicated under General Provisions. The renewable net energy metered (NEM) generation, which includes a solar photovoltaic; solar thermal; wind powered; hydroelectric; geothermal; tidal or wave energy; recycling resource; hydrogen fueled or combined heat and power derived from renewable resources; or biomass fueled generation source of energy, is installed on Customer's side of the delivery point, for Customer's own use, interconnected with and operated in parallel with Company's system. The generation must be located at a single premises owned, operated, leased or otherwise controlled by Customer.

Service under this Rider is closed to new participants on and after January 1, 2021, or when the statutory minimum system capacities described in S.C. Code § 58-39-130 have been reached, whichever occurs first. Customers requesting NEM service after January 1, 2021, will receive service in accordance with the NEM tariff in effect at that time. This Rider shall expire and no longer be available for NEM service on and after January 1, 2026.

GENERAL PROVISIONS

1. To qualify for service under this Rider, Customer must comply with all applicable interconnection standards and must provide, in writing, the Nameplate Capacity of Customer's installed renewable generation system. Any subsequent change to the Nameplate Capacity must be provided by Customer to Company in writing by no later than 60 days following the change.

2. To qualify for service under this Rider, a residential customer may be served on an approved residential rate schedule, but may not be served under Rider NM. The Nameplate Capacity of Customer's installed generation system and equipment must not exceed 20 kW AC.

3. To qualify for service under this Rider, a nonresidential customer may be served on an approved general service rate schedule, but may not be served on Schedules SGS-TES, TSS, TFS, LGS-RTP, LGS-CUR-TOU, CSG, CSE, GS, SFLS, SGS-TOU-CLR or Rider NM. The Nameplate Capacity of Customer's installed renewable generation system and equipment must not exceed 1,000 kW AC or 100% of Customer's contract demand which shall approximate Customer's maximum expected demand.

4. If Customer is not the owner of the premises receiving electric service from Company, Company shall have the right to require that the owner of the premises give satisfactory written approval of Customer's request for service under this Rider.

5. All environmental attributes, including but not limited to "renewable energy certificates" (RECs), "renewable energy credits" or "green tags", associated with the generation system shall be conveyed to Company until billing of a Distributed Energy Resource Program Rider DERP Charge is discontinued on all customer bills. Customer certifies that the environmental attributes have not and will not be remarketed or otherwise resold for any purpose, including another distributed energy resource standard or voluntary purchase of renewable energy certificates in South Carolina or in any other state or country for the Contract Period and any successive contract periods thereto.

6. If the electricity supplied to Customer by Company exceeds the electricity delivered to the grid by the customer-generator during a monthly billing period, the customer-generator shall be billed for the net electricity in kilowatt hours (kWh) supplied by Company plus any demand or other charges

under the applicable rate schedule or riders. If the electricity delivered to the grid by the customer-generator exceeds the electricity in kWh supplied by the utility during a monthly billing period, the customer-generator shall be credited for the excess kWh generated during that billing period.

7. Electricity delivered to the grid by Customer's renewable generation that exceeds the electricity delivered by Company is defined as Excess Energy. When used in conjunction with a time of use schedule, the TOU periods shall be specified in the applicable schedule and any Excess Energy shall apply first with the Excess Energy generated On-Peak kWh offsetting On-peak usage and then offsetting Off-peak usage. Any excess Off-Peak kWh shall only apply against Off-peak kWh usage. Any Excess Energy not used in the current month to offset usage shall carry forward to the next billing month.

8. Excess Energy shall be used to reduce electricity delivered and billed by Company during the current or a future month, except that for the March billing period any carry-over shall be compensated as described in the RATE paragraph below. In the event Company determines that it is necessary to increase the capacity of facilities beyond those required to serve Customer's electrical requirement or to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, Customer shall pay the estimated cost of the required transformer or other equipment above the estimated cost which Company would otherwise have normally incurred to serve Customer's electrical requirement, in advance of receiving service under this Rider.

9. The rates set forth herein are subject to Commission Order No. 2015-194, issued in Docket No. 2014-246-E pursuant to the terms of S.C. Code § 58-40-20(F)(4). Eligibility for this rate will terminate as set forth in that Order, and otherwise as specified above. The value of NEM generation eligible for this Rider shall be computed using the methodology contained in Commission Order No. 2015-194, in Docket No. 2014-246-E, and shall be updated annually by Company. The value of NEM generation for ~~2017~~ 2018 is $0.~~05013~~ 05036 per kWh for Schedules RES, R-TOUD, and SGS and $0.~~05017~~ 05026 for all other schedules.

RATE

All provisions of the applicable schedule and other applicable riders will apply to service supplied under this Rider, except as modified herein. For any bill month during which the Energy Charges are a net credit, the respective Energy Charges for the month shall be zero. Credits shall not offset the Basic Facilities Charge or the Demand Charge (if applicable). In addition to all charges in the applicable rate schedule for Customer's net electrical usage, the following credit may be applicable annually:

Annual Credit for Excess Generation –

If Customer has Excess Energy after offsetting usage as of the date of the March billing, Company shall pay Customer for the amount of the accumulated Excess Energy times a rate of $0.04290 per kWh, after which the amount of Excess Energy shall be set to zero.

MINIMUM BILL

The monthly minimum bill for customers receiving service under this Rider shall be no less than Basic Facilities Charge from the applicable rate schedule and riders plus, if applicable, any of the following Charges: the Demand Charge, the Off-peak Excess Demand Charge, and the Extra Facilities Charge.

METERING REQUIREMENTS

~~Customer must provide access and designate a location on the load side of the billing meter for Company to furnish, install, own and maintain metering with 15-minute interval capability to record 100% of Customer's generator output. At Company's sole option, the generator meter requirement may be waived for customers served under a net metering rider on or before December 31, 2015.~~ Company will ~~also~~ furnish, install, own and maintain a billing meter to measure the kilowatt demand delivered by Company to Customer, and to measure the net kWh purchased by Customer or delivered to Company. For renewable generation capacity of 20 kW AC or less, the billing meter will be a single, bi-directional meter which records independently the net flow of electricity in each direction through the meter, unless Customer's overall electrical requirement merits a different meter. For larger renewable generation capacities, Company may elect to require two meters with 15-minute interval capabilities to separately record Customer's electrical consumption and the total generator output, which will be electronically netted for billing. Customer grants Company the right to install, operate, and monitor special equipment to measure Customer's generating system output, or any part thereof, and to obtain any other data necessary to determine the operating characteristics and effects of the installation. All metering shall be at a location that is readily accessible by Company.

SAFETY, INTERCONNECTION AND INSPECTION REQUIREMENTS

This Rider is only applicable for installed renewable generation systems and equipment that complies with and meets all safety, performance, interconnection, and reliability standards established by the Commission, the National Electric Code, the National Electrical Safety Code, the Institute of Electrical and Electronic Engineers, Underwriter's Laboratories, the Federal Energy Regulatory Commission and any local governing authorities. Customer must comply with all liability insurance requirements of the Interconnection Standard.

POWER FACTOR

Customer's renewable generation must be operated to maintain a 100% power factor, unless otherwise specified by Company. When the average monthly power factor of the power supplied by Customer to Company is other than 100%, the Low Power Factor Adjustment stated in Company's Service Regulations may be applicable. Company reserves the right to install facilities necessary for the measurement of power factor. Company will not install such equipment, nor charge a Low Power Factor Adjustment if the renewable generation system is less than 20 kW AC and uses an inverter.

CONTRACT PERIOD

Customer shall enter into a contract for service under this Rider for a minimum original term of one (1) year, and shall automatically renew thereafter, except that either party may terminate the contract after one year by giving at least sixty (60) days prior notice of such termination in writing.

Company reserves the right to terminate Customer's contract under this Rider at any time upon written notice to Customer in the event that Customer violates any of the terms or conditions of this Rider, or operates the renewable generation system and equipment in a manner which is detrimental to Company or any of its customers. In the event of early termination of a contract under this Rider, Customer will be required to pay Company for the costs due to such early termination, in accordance with Company's South Carolina Service Regulations.